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School of Technology

EASTERN ILLINOIS UNIVERSITY

TECHNOLOGIST

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Volume 9 Spring 1996

SCHOOL OF TECHNOLOGY STUDENT AWARDS

Seven Industrial Technology and Technology Education students received scholarships for the 1996-97 academic year. The awards were presented at an Awards Reception held on April 17, 1996.

Jeremy M. Schwartzkopf, son of David Schwartzkopf of Dubois, Illinois, was the recipient of the Walter A. Klehm Award. Jeremy is an Industrial Technology major with a concentration in electronics. Jeremy is involved in the student chapter of the National Association of Industrial Technology.

Aaron W. M. Summers, son of Stephen and Janey Summers of Beecher City, Illinois, was the recipient of the Lucille Klehm Award. Aaron is a senior majoring in Technology Education and Industrial Technology with concentrations in construction and manufacturing. Aaron has been involved in NAIT and SME. He is a member of the Tri-County Fire Department and serves on the ex-officio committee for the Effingham County Emergency Telephone System Board.

Brett A. Thompson, son of Richard and Frankie Thompson of Oreana, Illinois, was the recipient of the Lois Elliott Award. Brett has been involved in the Residence Hall Association, Carman Hall Council, Taylor Hall Council, national Residence Hall Honorary, and Youth League (baseball coach.) Brett is a Technology Education major with a concentration in electronics.

Richard D. Hilton, of Iuka, Illinois, received the Charles Elliott Award. Richard is majoring in Technology Education with concentrations in drafting and construction, and has a minor in English.

William F. Gonzalez, son of Francisco and Alicia Gonzalez of Hoffman Estates, Illinois, was the recipient of the Alumni Scholarship. This award is presented each year to a senior or graduate student in the School of Technology through funds contributed by alumni of the School of Technology. William is majoring in Industrial Technology with a concentration in manufacturing. He worked three years for Tubar Security Products, Inc., of Hoffman Estates prior to his enrollment at EIU. He has been the floor representative for Hall Council, and is active in intramural sports and SME.

Front(left to right): William Gonzalez, Ryan Archey and Rich Hilton. Back (left to right): Jeremy Schwartzkopf, Brett Thompson, Kurt Hesterman, Aaron Summers

Kurt L. Hesterman, son of Gary and Leslie Hesterman of West Chicago, Illinois, received a Roy Ehrsam Award. Kurt is majoring in Industrial Technology with a concentration in manufacturing. Kurt is involved in the University Honors program.

A second Roy Ehrsam Award was presented to Robert M. Coffey, son of Charles and Janice Coffey of Bolingbrook, Illinois. Robert is majoring in Industrial Technology with a concentration in manufacturing and has a minor in business administration. Robert is a member of SME and NAIT, and is involved in intramural sports.

Ryan C. Archey, an industrial technology major with a concentration in manufacturing technology, received John Henry Scholarship from American Society of Quality Control. Ryan represented Eastern Illinois University. Other two recipients were from the University of Illinois at Champaign-Urbana and Illinois State University, respectively. The scholarship was established to promote students to work in the field of quality sciences, in honor of late professor John Henry at the University of Illinois at Urbana Champaign. Dr. Henry was one of the founding pioneers for American Society of Quality Control.

FACULTY SABBATICAL LEAVE ACTIVITIES

Dr. John Messer's fall semester leave involved the study of curricular needs in the Energy Laboratory, specifically electronics. Two courses are currently being developed in the areas of data communication systems and data acquisition. The data communications systems course will be offered this summer as a special topic class. Future courses will focus on industrial automation and control systems.

Dr. Mori Toosi spent the spring semester 1996 on sabbatical leave to study the extent that companies in east central Illinois and west central Indiana have integrated computers in their manufacturing activities. His study will identify problems associated with computer integration in metal-related manufacturing, identify competencies needed by Industrial Technology graduates of Eastern Illinois University, and provide new data for developing new courses or modifying existing courses to meet industrial needs.

Eight metal-related manufacturing firms participated in the study and provided data to achieve its goals. These findings will provide curricular guidelines and set goals for the Manufacturing Option in the Industrial Technology degree program.

Dr. Deborah Woodley is working for R. R. Donnelley & Sons, the largest printing firm in the United States. As an introduction to the Donnelley environment, Dr. Woodley spent a month in both the offset and gravure preliminary areas as well as experiencing Core Training, Donnelley's high employee involvement program. Dr. Woodley was then assigned to the offset digital preliminary area since that area was receiving the most digital files, was a beta

See **SABBATICAL** *page 3*

SCHOOL OF TECHNOLOGY STUDENT ORGANIZATIONS

Society of Manufacturing Engineers

The Society of Manufacturing Engineers has more than 80,000 members and has chartered more than 300 Senior Chapters and 175 Student Chapters and Units. The Society welcomes students studying manufacturing engineering or related technologies.

The purpose of the Society is to advance scientific knowledge in manufacturing engineering, provide the means and methods of applying such knowledge in practice and education, and to promote and engage actively in research, writing, publishing, and dissemination of knowledge within this field.

These are the officers of the Society of Manufacturing Engineers Student Chapter at Eastern Illinois University:

NAIT (left to right) Dottie McKenna, president; Scott Loeffler, vice

SME (left to right): Bret Dawkins, secretary; Louis Bratton II, trea-

A LETTER FROM THE ACTING CHAIR

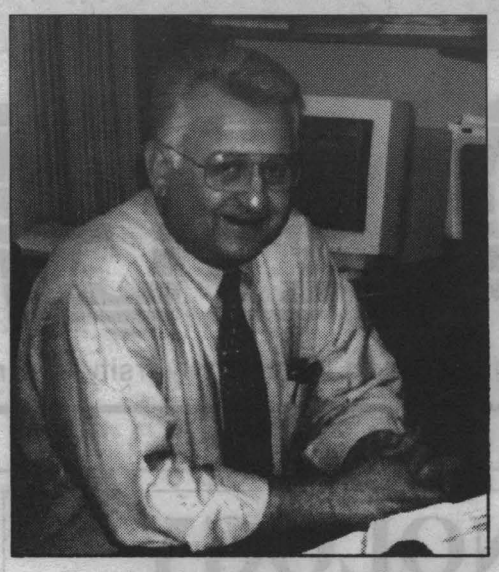
During the 1995-96 academic year the School of Technology has had many positive and productive opportunities. We currently have 169 undergraduate and 79 graduate students in Technology. Thirty-two of the undergraduates are Technology Education majors. The Career Occupation program has 210 active undergraduate students. Due to the efforts of Dr. Don Armel the number of majors in the Technology Education option has increased and will continue to do so according to the demand for Technology Education teachers.

The Technology graduate and Career Occupations programs are currently offered at Eastern Illinois University, Champaign, Danville and some courses at Decatur and Effingham. The Career Occupations program continues to grow and the demand for Adult Education seems to be the trend of the future. The graduate coordinator of the School of Technology has been busy promoting the graduate Technology program in the Effingham and Decatur areas and the possibility of growth in both areas looks promising. The quality and quantity of research opportunities for graduate and undergraduates continues to flourish.

Currently we have ten graduate assistantships four of whom are research assistants with Dr. Ping Liu. Dr. Liu also has several undergraduate students assisting with polymer and tribology funded research. During the year we have purchased a new plastic injection molding machine, nine pentium computers for offices and the materials and Computer Aided Design lab, a new vertical cutoff saw, a new ironworker, a robot controller, electronic equipment, AutoCad Lite, and several items for testing plastics. Donations of equipment have been outstanding, totaling $157,495.

To meet student advising needs in the department, a centralized advising office was established in 102 Klehm (the old copy/work room). We were able to furnish the office and added carpet. New vertical drapes were donated by Miller Automotive Service of Charleston. Mrs. Lydia Fritts (BS 1971) was employed half-time to maintain the Career Occupations files and assist students with question about the program. Mrs. Betsy Miller (BS 1995) was employed as Academic Advisor for the School of Technology. We are very fortunate to have two well informed and dedicated employees to staff the Advisor Office. All graduates are invited to come by and meet Lydia and Betsy and pick up recruiting pamphlets. If you cannot come to the office and need recruiting materials, call the Advising Office at 217-581-7128 and the materials will be mailed to you.

The Strategic Plan, a process for systematically planning the future of the School of Technology, has been in effect for three years. During the process this year, President David Jorns and Dean Ted Ivarie were given an in-depth tour of the School of Technology. They are both acutely aware of our needs (faculty, equipment and space), but can only provide financial assistance as the state budget allows.



Even though we continue to solicit support from business and industry we desperately need the active assistance and support of all our graduates. I am asking each of you for your active involvement with recruiting, financial support and industrial contacts to guarantee continued growth in our programs.

The Annual Telefund activity is beneficial but does not generate the amount of funds that are required to equip our labs with state-of-the-art equipment. As graduates and employees, you are aware of the quality equipment that is essential in the labs to provide top quality education for School of Technology students. Think of the benefits you would have gained if that equipment had been available during your educational career.

Since many of you are financially able to contribute and are in management positions that can influence donations from companies please consider the different ways you can assist the School of Technology:

Annual Cash Donations - You can designate a specific use for your donation and it can be made directly to the School of Technology.

Annual Matching Donations - Many of you are employed by companies that will match your donations to the School of Technology. Please check to see if this is possible. Double your donation!

Equipment - Computers, electrical/electronics, plastic processing, metal machining, welding/fabrication, office and classroom furniture and machines, CNC and automation, pneumatic/hydraulic trainers, software, audio visual for classrooms, office supplies (paper, pens, etc.) and the list goes on.

Equipment/Items for Sale - If you or a company as a donor specifies that a donated item can be used or sold we now have a process to sell donated items to generate dollars for use in the School of Technology. If you have quality surplus equipment that is usable in other industries we may be able to sell it to benefit the School of Technology. Again, you can specify where you want the dollars to be used.

Software - Current versions of AutoCad, SPC, Electronic Workshop, Windows software, MAC software, etc.

Scholarships - You or companies can donate funds to establish scholarships for School of Technology students. A super way to assist in recruiting students. The donor can specify the student qualifications, interview potential students and select the recipients.

Recruiting - As School of Technology graduates you know the quality of your degree from the School of Technology and how it has benefited you. Each of you has influence with employers, contacts with secondary schools and junior colleges, contacts through professional organizations and many others. Use these contacts to recommend the School of Technology to potential Industrial Technology and Career Occupations majors. Speak at professional organization regional meetings to promote the School of Technology. You supply the names and addresses of potential students to us and we will do the follow-up to recruit students.

The School of Technology is at a crucial period and we have the opportunity to develop from a very good School of Technology to a true state-of-the-art Technology Center. But we need your help. So please consider all the different ways you can assist your alma mater in developing into a School of Technology that is second to none. Become actively involved in the future of the School of Technology. If you have ideas that would benefit the SOT please call me and discuss your thoughts and concerns. Should you plan a visit to EIU when Klehm Hall is not open, please contact me and I will arrange a tour.

As I write this letter, we are in the process of conducting a second search for a new Chair for The School of Technology. A candidate should be selected by July 1 to guide the faculty, staff and students into what we anticipate as a period of growth and a bright future for the School of Technology.

Sincerely,

Tom Waskom

Tom Waskom
Acting Chair, (217) 581-3226

1995-1996 DONATIONS TO THE SCHOOL OF TECHNOLOGY

The following items with a value of $157,495 were donated by individuals and companies to the School of Technology.

1. Vertical blinds - $450 - SoT Advisor Office
   Donor: Miller Automotive
   Charleston, IL
   Betsy and Gregg Miller

2. Cutting Tool Holders and Inserts - Appox. $12,000
   Donor: Sandvik Coromant Company
   Peoria, IL
   Dick Trudeau, Zone Manager
   Mike Hartwig - Sales Engineer

3. Mubea Ironworker - Sold for $8,000
   Donor: AgriFab, Inc.
   Sullivan, IL
   Harold King - Technical Services Manager

4. Scanning Electron Microscope - $45,000
   Donor: Apogee Medical Products
   Effingham, IL
   Mark Brillhart

5. Cash Donations matched by McDonald Douglass - $650

6. Rheometrics Mechanical Spectrometer - $90,000
   Donor: Quantum Chemical Company
   Cincinnati, OH

7. Autoload Materials Transfer System - $1,095
   Donor: Autoload, Incorporated
   Smithville, MO

8. Plastic Resins and Pelletized HDPE for research - $300
   Donor: Quantum Chemical Company
   Cincinnati, OH

School of Technology Alums:
Please let us know where you are and what you're doing!!
Newsletter Editor
School of Technology/EIU
Charleston, IL 61920

SCHOOL OF TECHNOLOGY STUDENT INTERNSHIPS

Student internships are experimental learning activities designed to help students apply previously learned concepts, theories, principles, and skills while working in an industrial, business, or commercial environment. Students have the opportunity to increase their technical knowledge, managerial skills, and marketability in their area of concentration by participating in the day-to-day operation of a specific industry or business.

These undergraduate and graduate students were enrolled in the 1995-96 School of Technology's internship program:

Robert Bonds - EIU Physical Plant (Engineering) - CAD operator - Surveying field conditions of projects - Maintenance of blueprints and CAD drawings

Louis Bratton - Trailmobile, Inc. - Create, maintain and develop CNC programs and routings for five CNC machines. The implementation of SmartCam software and database entries.

Ryan Gardner - Blaw Knox Construction Equipment Co. - Mattoon, IL - Manufacturing Engineer assigned to develop special projects in the machine production area.

Donald Stumpf - Blaw Knox Construction Equipment Co. - Mattoon, IL - Manufacturing Engineer assigned to special projects in processes, ergonomics and safety.

Nathan Wall - EIU Physical Plant (Engineering) - Assigned to survey EIU campus buildings and room utilization to update data base files.

Richard Hilton - EIU Physical Plant (Engineering) - Engineering Staff - Project management - Survey parking lots -Project development.

Ryan Archey - Trailmobile, Inc. - Developed and maintained NC programs for five CNC machines. Developed and maintained routings for all machines in the fabrication department. Assisted in implementing SmartCam software. Special projects.

Tony Campos - Jack Meyer Construction, Mattoon, IL - Involved in all aspects of residential construction.

Gary Click - Ampad, Mattoon, IL - Shipping group leader - Supervised eight employees, billings and filling orders.

Mike Corbin - Blaw Knox Construction Equipment Co., Mattoon, IL - Manufacturing Engineer - Special assignments in manufacturing processes.

Larry Lempa - Blaw Knox Construction Equipment Co., Mattoon, IL - Manufacturing Engineer assigned to special projects.

Mike Watts - Trailmobile, Inc. - Maintenance department - Assigned to maintain work orders, design and implement a preventative maintenance program and schedule and chart maintenance projects.

Thom Capps - Mattoon Precision Manufacturing Inc. - Mattoon, IL - Engineering department - Engineering documentation generation and updating - Time study - QC testing of parts and tracking engineering changes.

Jesse Horton - EIU Physical Plant (Engineering) - Designed renovation and new projects (parking lots, sidewalks, structure modifications, Greek Court Road, compressors and HVAC systems) - CAD operator - Inspection of contractor projects.

Paul Dirienzo - Blaw Knox Construction Equipment Co., Mattoon, IL - Manufacturing Engineer - Special projects

Andy Lay - Blaw Knox Construction Equipment Co. - Mattoon, IL - Manufacturing Engineer - Special projects - Document and improve manufacturing processes.

Dottie McKenna - Blaw Knox Construction Equipment Co., Mattoon IL. - Human Relations Dept. - Revised and developed programs that led to OSHA compliance - Designed personal protective equipment and emergency response and preparedness programs.

John Ovall (Physics major) - Trailmobile Inc. - Manufacturing Engineer - Special projects in NC programming and routings - Implemented SmartCam software.

Jim McKirahan - Kal Kan, Mattoon, IL - Computer programming for automation processing.

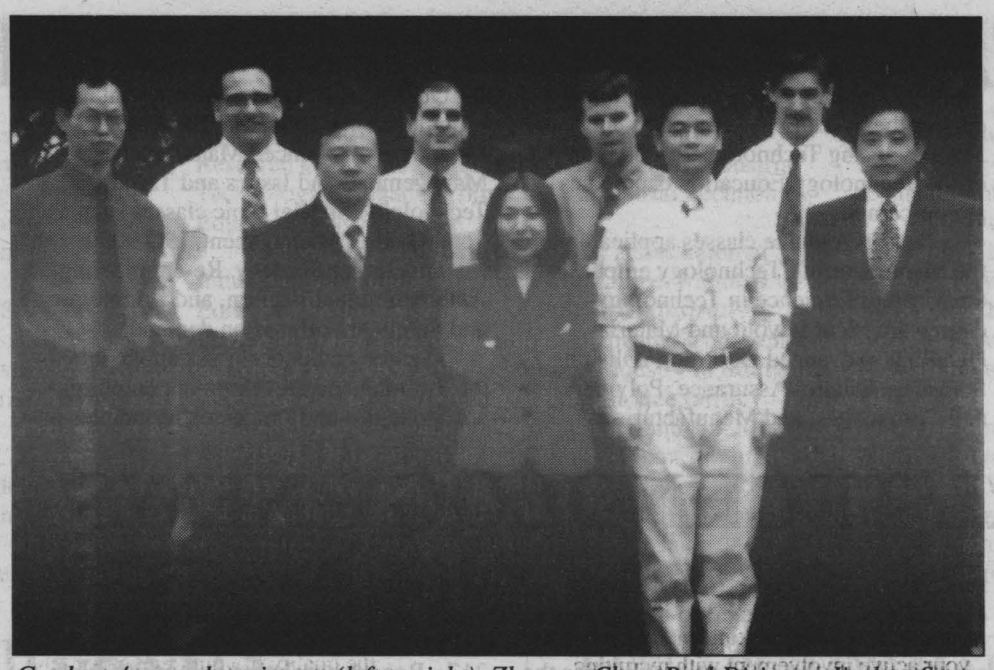
1995-1996 GRADUATE ASSISTANTS' PROFILES

The School of Technology has ten graduate assistants this current year. Six are on the internal budget and four are research assistants in the Testing Laboratory. Graduate assistants spend from 12-15 hours per week monitoring the open laboratories, assisting undergraduate students with laboratory activities, maintaining equipment, and assisting faculty and coordinators in the laboratories.

Zhongyu Chen is a native of Hangzhou, People's Republic of China, and graduated from Daqi High School in Ningbo, PRC. He later graduated from Zhejiang University, Hangzhou, with a major in Materials Science and Engineering. Chen came to Eastern Illinois University in the spring of 1994 and has been an assistant in the Materials Testing Laboratory with an assignment to research Cu-Cr composite materials. His research is sponsored by the National Science Foundation. Chen plans to pursue a Doctor of Philosophy degree in Materials Science Engineering at a major university. He is a member of the ASM International and the Minerals, Metals and Materials Society.

Paul Dirienzo graduated from Downers Grove South High School and is a resident of Woodridge, Illinois. He earned a Bachelor of Science degree from Eastern Illinois University with a major in Industrial Technology and an option in manufacturing technology. Paul is an assistant in the Production Laboratory. He is a vice president of the student chapter of the National Association of Industrial Technology, a member of the University's Graduate Student Advisory Council, and the Newman Catholic Center. His hobbies are radio controlled planes, cars, and boats. Paul plans to work in the field of manufacturing/engineering technology and later begin a specialty machine shop.

Ryan Gardner is from Ridgefarm, Illinois and a graduate of Georgetown-Ridgefarm High School. He graduated from Eastern Illinois University with a Bachelor of Science degree with a major in Technology Education and electronics as an emphasis. He is an assistant in the Energy Laboratory and a member of the National Association of Industrial Technology and Epsilon Pi Tau. Ryan plans to teach in the Chicago area and possibly relocate to Colorado later. His hobbies are hunting, fishing, and skydiving.



Graduate/research assistants (left to right): Zhongya Chen, Paul Dirienzo, Jinshan Song, Joe Pecoraro, Mari Ogawa, Ryan Gardner, Yanze Li, Jesse Horton and Ke Wang.

Jesse S. Horton completed his baccalaureate degree at Eastern Illinois University with a major in the Industrial Technology's construction concentration. He is the graduate assistant in the Computer Integrated Manufacturing Laboratory and is a member of the Society of Manufacturing Engineers, serving as chairman and also treasurer. Other professional memberships include the National Association of Industrial Technology, serving as secretary, and Epsilon Pi Tau honorary scholastic fraternity. Jesse is a native of and high school graduate of Kansas, Illinois. His hobbies include woodcarving and reading, and he plans to continue his studies in architecture to become a licensed architect.

Yanze Li is a native of Shanghai, People's Republic of China. He graduated from the Shanghai University of Science and Technology with a major in polymers. Li's assistantship assignment is the study of the rheological behavior of a composite of recycled high density polyethylene and recycled rubber in the Materials Testing Laboratory. He is a member of the American Society for Quality Control. Li has personal interests in swimming, traveling, and chatting with friends over the world through the Internet phone system. He plans to continue in his fields of interest through employment with a chemical company.

James McKirahan graduated from Stephen Decatur High School, Decatur, Illinois. He later earned a Bachelor of Science degree with a major in Industrial Technology and a Master of Science in Technology degree, both from Eastern Illinois University. His assistantship assignment is in the Materials Testing Laboratory with emphasis on polymers. Jim is a member of the Society of Plastics Engineers and will present his research paper on high density polyethylene at the national conference in May. Jim will enroll at Ball State University to pursue a doctorate in plastics manufacturing technology this fall.

Mari Ogawa is from Yokohama, Japan, and a graduate of Nakazawa High School. She is the graduate assistant in the Communication Laboratory and has her baccalaureate degree from Eastern Illinois University with a major in Journalism and a concentration in photojournalism. Mari's hobbies are photography, listening to music, roller blading, and cooking. She plans to pursue a career in photography with a newspaper or magazine after graduation.

Joe Pecoraro completed a Bachelor of Science degree with a major in Industrial Technology with a concentration in construction from Eastern Illinois University before beginning his assistantship in the Mechanical Laboratory. He is a member of the National Association of Industrial Technology, Epsilon Pi Tau, and Kappa Delta Rho. Joe is a native of Springfield, Illinois, and graduated from Sacred Heart-Griffin High School. His hobbies are fishing, sports, and reading. He plans to work in industry or for the state; and may enter a Master of Business Administration program later.

Jinshan Song graduated from Quzhou Number 1 High School, Zhejiang, People's Republic of China. He later earned a baccalaureate degree from Zhejiang University with a major in Materials Science and Engineering. He is currently an assistant in the Materials Testing Laboratory studying the wear of ultra-high molecular weight high density polyethylene for use as artificial joint replacements. Song plans to continue study toward a doctorate after completing his Master of Science degree at Eastern Illinois University.

Ke Wang graduated from his hometown Hangzhou Twelfth High School, People's Republic of China. He later graduated from the Hefei University of Technology with a major in Computer Science. He is an assistant in the Materials Testing Laboratory. His personal interests are stamp collecting, fishing, and listening to classic or light music. He plans to continue his graduate studies with a major in Computer Science after completing his studies in Eastern Illinois University's Master of Science in Technology degree.

1996-1997 GRADUATE ASSISTANTS

These persons have been extended contracts for graduate assistantships for the 1996-1997 academic year:

Craig Adams, Energy Laboratory.
Ryan Archey, Materials Testing Laboratory.
Louis Bratton, Production Laboratory.
Bryan Reaka, Materials Testing Laboratory.
Mona L. Taylor, Communication
Mimghai Yao, Mechanical Laboratory
Schuyler Duarte, Computer Integrated Laboratory
Jason G. Boulanger, Materials Testing Laboratory

SABBATICAL

site for several new technologies and was introducing employees to **Preps**, a new imposition software for the direct-to-plate process. She spent the next several months working with employees to establish procedures and workflow in offset's digital prepress area. One of the results was approximately 50 pages of documentation that gave employees quick access to the standard operating procedures in the digital prepress area. This documentation included revisions and additions to a **Digital Specifications** document that is distributed to new customers.

At the end of November, Dr. Woodley began work with digital gravure to establish a training program for employees new to the gravure Macintosh digital area. After eliciting input from employees about their needs, she developed a booklet which gave them a quick reference to the workflow in gravure, the hardware setup, a listing of medias they might receive from customers, a reference on Macintosh quick keys, a decimal equivalents reference, and a glossary of terms specific to gravure and desktop publishing. The booklet was revised for use in offset and a third copy designed for general use and shared with Effingham High School, one of the members of the Printing Technology Advisory Committee with which Woodley has been associated.

In addition to work with Donnelley's, Woodley has continued as Eastern's representative on the Printing Technology Advisory Committee and has undertaken several activities associate with that organization including the development of print projects for Effingham High School, serving on Mattoon High School's Print Advisory Board, and attending advisory board meetings.

Currently, Woodley is training four gravure employees in desktop procedures and there are plans for her to train several more digital offset employees. During the final months of her sabbatical, Deborah will be working with fellow employees to establish a digital check in procedure using **Desktop PreFlight and Finishing** software and will be developing a training program for Kodak thermal plate technology. This program will be delivered to Kodak salespeople at Donnelley's plant in Mattoon.

During her sabbatical, Dr. Woodley has also written several articles that should be of interest to print magazines and educational publications.

ORGANIZATIONS

Bret plans an industrial career in the mid-Illinois area.

Treasurer—Louis E. Bratton II. Louis will be a graduate assistant in the 1996-1997 academic year in the School of Technology. Louis' major is Industrial Technology with a manufacturing option. His home town is Georgetown, Illinois, and he is a graduate of Georgetown-Ridge Farm High School. He is a member of the National Association of Industrial Technology and Tau Kappa Epsilon, having served as president and chaplin. His hobbies are hunting, fishing, and golfing.

National Association of Industrial Technology

The Student Chapter of the National Association of Industrial Technology at Eastern Illinois University promotes the development of leadership capabilities of industrial technology students, provides opportunities for the study and discussions of all questions, issues, and problems related to programs in industrial technology, and carries out the purposes and objectives of the National Association as they apply to students enrolled in such programs.

These are the officers of the Student Chapter of the National Association of Industrial Technology at Eastern Illinois University:

President—Dottie McKenna. Dottie is a Technology Education major from Belleville, Illinois, and a graduate of Belleville Township High School West. Her hobbies include rollerblading and other outdoor activities. She plans to teach after graduation from Eastern Illinois University.

Vice President—Scott Loeffler. Scott is an Industrial Technology major with a concentration in construction management. He graduated from Belleville West High School in Belleville, Illinois, his home town. His hobbies include being match secretary and captain of the Eastern Illinois University rugby team. Scott plans to enter the construction business as a superintendent, move up to a project manager, and eventually own a residential construction company.

The Student Chapter of the National Association of Industrial Technology at Eastern Illinois University promotes the development of leadership capabilities of industrial technology students, provides opportunities for the study and discussions of all questions, issues, and problems related to programs in industrial technology ...

The purpose of the Society is to advance the scientific knowledge in manufacturing engineering, provide the means and methods of applying such knowledge in practice and education, and to promote and engage actively in research, writing, publishing, and dissemination of knowledge within this field.

Secretary—Randall St. Peters. Randall's Industrial Technology concentration is production processes. He is from Jerseyville, Illinois, and a graduate of Jerseyville Community High School. His hobbies include working on cars and motorcycle riding. Randall plans to work in the Saint Louis, Missouri area for a manufacturing company.

Treasurer—Bret Dawkins. Bret is an Industrial Technology major in the manufacturing option. He is a graduate of Moweaqua High School. Bret is a member of the National Association of Industrial Technology and serves as its treasurer. His hobbies are fishing, hunting, and motorcycling.

Bret plans an industrial career in the mid-Illinois area.

GRADUATE PROGRAM NEWS

The Master of Science in Technology degree program has 79 active degree candidates this spring semester 1996. Fifty-six percent of the candidates are pursuing the Training and Development emphasis, 38 percent Manufacturing Technology, and six percent Technology Education. Fourteen candidates will complete their degree requirements this semester.

The number of off-campus candidates has increased to 56 percent of the total. Over half of these candidates have chosen the Training and Development emphasis at the Parkland College site. The Danville Area Community College site has grown to 19 percent of the total, over half of those in Training and Development. Seventy percent of the on-campus candidates chose Manufacturing Technology. Eighty percent of the Technology Education candidates are on-campus.

Senior-graduate classes applicable to the Manufacturing Technology emphasis of the Master of Science in Technology degree are Plant Layout and Material Handling, Advanced Desktop Publishing, Statistical Quality Assurance, Polymers and Composites, and Manufacturing Management. Graduate-level courses are Industrial Productivity Analysis, Design for Quality, Advanced Computer Integrated Manufacturing, Industrial Systems Simulation, Advanced Manufacturing Management, and Issues and Trends in Technology. Special topic classes such as Total Quality Management, ISO 9000, Manufacturing Strategy, Re-engineering, Automatic Identification, and Ergonomics and Safety are offered on demand.

Senior-graduate classes applicable to the Training and Development emphasis are Strategies and Processes, Principles of Career Development, Sociotechnical Design, Occupational Perspectives, and Training Program Development. Graduate-level classes are Trends and Issues in Training and Development, Work Performance Technology, Instructional Technology, Training Systems Management, and Seminar in Occupational Education. Special topic classes such as Productive Work Teams, Conflict in the Workplace, Cultural Diversity, Quality Processes in the Workplace, and Facilitation Dynamics are offered on demand.

INDUSTRIAL TECHNOLOGY NEWS

On April 11, Ryan Archey was awarded the John Henry Award by the American Society for Quality Control at the annual award banquet in Dalton City. The award is to recognize outstanding work by a student in the area of quality control. The award consisted of a plaque and a stipend.

The annual "Egg Drop," a requirement by Mr. Ray Richardson for his INT 1413 class was held April 10. Coach Bob Spoo served as official "Egg Dropper" and several Pink Panthers were kind enough to serve as official judges. Scoring was based on the sound of eggs stopping suddenly. WEIU-TV and *The Daily Eastern News* provided coverage for the entertaining event.

The first plastics course was offered this Spring. This is the first of several courses that are expected to be developed to teach plastics technology. This semester is an opportune time to offer the course since the Boss plastic injection machine arrived the first week of April. The new plastic processing and testing equipment provides excellent educational opportunities for students since this equipment is comparable to that in many industries.

The annual Telefund was completed April 12 and contributions were below normal. One major reason was that many alumni addresses and telephone numbers were incorrect. Please take the time to update your current address and telephone number with the alumni office (EIU Alumni Office, Booth House, Charleston, IL 61920, (217-581-6616).

A metrology laboratory will be assembled this summer in Klehm Hall 217. Recent purchases and grants have provided adequate equipment to establish a very modern metrology laboratory that will allow students to study precise measurement processes that are the standard in high tech industries.

Current transfer and new student records indicate a healthy growth in the Industrial Technology and Technology Education enrollment for Fall 1996. Much of this growth can be attributed to the diligence of Academic Advisor Betsy Miller and faculty. Mrs. Miller has attended all EIU orientations, open houses and has sought every opportunity to recruit IT majors.

CAREER OCCUPATIONS NEWS

Livingston C. Lord Scholarship Awarded to Sue Powers

Sue Powers received the Livingston C. Lord Scholarship at the 1995 graduation ceremonies. The Lord Scholarships were established by the EIU Alumni Association in commemoration of Eastern's first president and are the University's highest awards for academic excellence. Each Lord scholar receives a special medal and a stipend. Students were evaluated on the basis of their potential for outstanding success in their chosen fields and high academic achievement. Powers, a certified instructor of trainers for Girl Scouts USA, has a successful background working with children, adolescents and adults. Sue stated, "I realized that I had practical experience in working with groups of children and adults but lacked the education and formal training, so I chose Career Occupations because it gave me that."

Career Occupation Student Excellence Award to Kathy Mattix

Kathy Mattix received her Career Occupation Student Excellence Award from Dr. Tom Boldrey and Cathy Kirby at the 1995 Adult Student Recognition Ceremony. Kathy has been the office manager for a dental practice in Tuscola. She is president of the Tuscola Chamber of Commerce. When asked about what education means to her, she said, "My education at Eastern has changed my perspectives, therefore my experience. I feel it has also refined my ability to reason. I will never stop learning because for me to learn is to live life to its fullest."

Career Occupations Eagles Award to Rita Pearman and Billie Mitchell

The Eagles Award is an award presented by Career Occupations faculty to students who soar above others. This award is only given to students who use their talents and broad perspectives in an exceptional manner to share with, to inspire, and to lead their classmates. The eagle symbolizes this award because it can see both the forest and the trees. It recognizes the parts and the whole as well as the complex relationship of the dynamic living systems. It is an award that is not necessarily given every year. Rita Pearman and Billie Mitchell were each presented with the Eagles Award during the Spring Adult Recognition Ceremony.

Rita is under contract for Valmont to provide technical assistance and support for its manufacturing software and information systems staff in Texas and Mexico. Rita demonstrated her passion for learning when she said, "I once thought that learning had boundaries, that formal education was a limit to real learning. I now know that learning has no boundaries. People create their own boundaries with closed mindedness or refusal to learn. Individuals who demonstrate a passion for learning demonstrate that passion not only in the classroom, but in every situation in which learning can be acquired."

Billie is the office assistant for the Director of Athletics at Parkland University. When Billie was asked about her passion for learning, she replied, "I have learned that learning is endless. I now know that I love to learn both in the classroom and out! My passion for learning was reawakened when I returned to school as an adult. Every time I achieve one goal, I am ready to set another. Fear and frustration can give way to confidence and success. I enjoy a feeling of well-being because I am more vital, self-confident and able."

How Did the Program Help You?

"The Career Occupations Program helped me realize that I could still compete in the classroom and eventually in the career marketplace against much younger position seekers. The program provided me with job seeking skills that I certainly put into motion; but the emphasis placed on opening an adult student's mind to new concepts and theories showed me how to adapt comfortably and confidently in an ever changing world."—Earl T. Ashmore, Class of 1994

"It's hard to condense in a few words - not only did I get a promotion at Palmer Bank and then move into my current position (Co-Director of Marketing & College Relations at Danville Community College) all because of the C.O. program, but I gained self-confidence, stronger decision-making skills and countless other management skills. But one of the best things about the C.O. program is all the friendships that I developed."—Lisa K. Smith, Class of 1990

"In my two most recent jobs in education, the Career Occupations program was viewed as unique preparation. I know the C.O. degree helped me to secure the job I wanted; the program also continues to help me in establishing rapport with career-oriented adults who are making the transition through business and industry downsizing and seeking retraining."—Allen Menard, Class of 1980

News from Career Occupations Alumni

Charles R. Farlow, Class of 1978, is a Senior Systems Engineer at Metters Industries, Inc., in Dayton, Ohio. In 1981, he received a Master of Science in Industrial Technology from the University of North Dakota.

Robert C. Lewis, Class of 1980, is an Associate Professor/Department Chair in Electronics at Moraine Valley Community College in Illinois.

FAILURE ANALYSIS TECHNOLOGY

Faculty in the School of Technology are active in the failure analysis problem solving of materials, mechanical components, and systems. Failure analysis will increase the life of products, prevent field failure problems from recurring, assist suppliers in continuously improving their products, identify the root causes of problems, and provide direction for their solutions. Engineers or managers often find constraints on their time, equipment, or comprehensive knowledge to solve problems and need an independent evaluation.

The Materials Testing Laboratory in the School of Technology is equipped with state-of-the-art analysis instruments and equipment. This capability includes a color image analysis system for microstructural analysis, a precise heating furnace, surface texture analysis instrumentation, video microhardness testing, plastics rheometers, and a polymer hardness testing system. Faculty in the School of Technology are fully committed to excellence in research and problem solving for industry. For technical questions, please contact Dr. Ping Liu at (217) 581-6267.

TECHNOLOGY EDUCATION NEWS

In 1990, the Technology Education program had but four students. Most university Technology Education nationwide related programs were under enrolled. Eastern Illinois University and Illinois State University have managed to survive this low period and now have enrollments of 30 and 60 respectively. Many high school and freshman students on-campus have requested information about the program at Eastern Illinois University.

Industrial Technology Education Conference

The Industrial Technology Education Conference sponsored by the Illinois Industrial Technology Education Association was held in Peoria in November , 1995. During the general session Pete Tucker, a Technology Education graduate and the Awards Committee Chair, presented Scott Touchette, a recent Technology Education graduate, with the IITEA/IVA Young Teacher of the Year award. Pete is a teacher at Highland High School, and Scott is a teacher at Triad High School.

Administrative Changes

The beginning of the 1995-96 academic year saw people in new positions within the department. Tom Waskom became the Acting Chair, Don Armel took over the Coordinator's position for Technology Education, and Howard Nelms accepted the responsibility of supervising student teachers.

TOM WASKOM TO SWEDISH KEY EXECUTIVE SEMINAR

Dr. Tom Waskom has been invited to attend a Key Executive Seminar in Sweden during the first week of June. The invitation was extended by Michael Abberley, Vice President of Sales, and Dick Trudeau, Zone Manager of Sandvik Coromant Company. Sandvik manufactures carbide cutting tools, tool holders, and various other industrial products. Dr. Waskom and approximately sixty top manufacturing executives have been invited to visit the world headquarters of Sandvik in Sandviken, Sweden.

Participants will have the opportunity to view the totally computerized process for the integrated Supply program which delivers products to anywhere in the world in 24 to 48 hours. In addition, there will be an opportunity to have direct input regarding any future tooling needs. The seminar will include the very latest innovations in metal cutting plus an opportunity to tour the most modern cutting tool manufacturing plant in the world. Mr. Rob Prosky (BS in Industrial Technology with a manufacturing option) is currently employed by Sandvik Coromant in Bloomfield Hills, Michigan, as a sales engineer.

SCHOOL OF TECHNOLOGY FACULTY AND PROFESSIONAL ORGANIZATIONS

During the last year School of Technology faculty were involved in various professional organizations at State and National levels. In addition, many served in leadership positions in professional organizations and contributed to the growth of the profession of Technologist.

Dr. Don Armel: Review Team, Illinois State Board of Education for ISU in Industrial Technology and Agriculture; Judge, Technology Student Association National Conference and Vocational Industrial Clubs of America State Conference.

Dr. Tom Boldrey: Executive Planning Committee for State Conference, Illinois State Board of Educators, Illinois Board of Higher Education, and Illinois Community College Board.

Dr. Louis Butler: Program Director, National Association of Industrial Technology Convention; Research Committee, National Association of Industrial Technology; Research Committee, Industrial Technology Education Association.

Dr. Mahyar Izadi: Chair, National Association of Industrial Technology Research Committee; Member of Editorial Review Board, *The Journal of Industrial Technology*; Publications Referee, Dedicated Conference on Rapid Prototyping in Automotive Industry in Stuttgart, Germany; Publications Selection Committee, Fifth International Conference on Productivity and Quality Research in Miami, Florida; Judge, Problem Solving Competition, Technology Students Association.

Dr. Ping Liu: Reviewer, National Science Foundation, Small Business Innovative Research in Surface Engineering and Tribology; Reviewer, The Charles and Ann Morrow Lindbergh Foundation; Member, John Henry Scholarship Committee, American Society for Quality Control Central Illinois Section.

Dr. Howard Nelms: Judge, EIU and Dr. Howard School in Champaign Science Fairs.

Mr. Ray Richardson: Judge, EIU and Dr. Howard School in Champaign Science Fairs.

Dr. Mori Toosi: Chair, National Association of Industrial Technology Research Committee University Division.

Dr. Tom Waskom: Past-President, Student Division, National Association of Industrial Technology.

Mr. C. William Watson: Proctor, Illinois JETS Engineering Graphics Test; Judge, Illinois Drafting Teachers Association, Regional Student Drafting Competition.

RESEARCH GRANTS, PUBLICATIONS, AND PRESENTATIONS

Research Projects Completed in 1995
By Dr. Ping Liu

1. National Science Foundation (ILI-DUE): "Implementing Plastic Recycling Experiments for Improvement of Undergraduate Laboratory Education in Materials Technology," (Principal Director, $96,850).

2. Illinois Department of Energy and Natural Resources through Office of Solid Waste Research at University of Illinois at Urbana-Champaign: "Thermoplastic Composites of Recycled High Density Polyethylene (HDPE) Reinforced by Short Glass Fibers," (Principal Investigator, $47,366).

3. Council for Faculty Research at Eastern Illinois University: "Study of Composites of Recycled High Density Polyethylene and Recycled Tire Chips," (Principal Investigator).

Research Grants Received in 1995
By Dr. Ping Liu

National Science Foundation (ILI-DUE): "Enhanced Plastic Recycling Experiments to Further Improve Undergraduate Materials Education." (Principal Director, $161,090).

Illinois Department of Energy and Natural Resources through Office of Solid Waste Research at University of Illinois at Urbana-Champaign: "Study of Composite Materials Made of Recycled High Density Polyethylene (HDPE) and Scrap Automobile Tire Particles," (Principal Investigator, $52,064).

The Charles A. and Anne Morrow Lindbergh Foundation: "Micromechanic Study of Recycled Plastic Composite using Finite Element Method: Promoting Balance between Plastics Application and Plastics Waste Reduction," (Principal Investigator, $10,540).

Council for Faculty Research at EIU: "Study of Composites of Recycled High Density Polyethylene and Recycled Tire Chips," (Principal Investigator, $3,640).

Projects On-Going in 1995
By Dr. Ping Liu

National Science Foundation (RIA-Tribology): "Investigation of Electrical Sliding Wear, Arc Erosion and Oxidation of Cu-15%Cr Deformation Processed Composite," (Principal Investigator, $95,971).

Publications and presentations by the faculty of the School of Technology

Z. Chen, P. Liu, J. D. Verhoeven and E. D. Gibson, "Sliding Wear Behavior and Microstructure Change of Deformation-Processed Cu-20%Nb *in situ* Composite," *Wear*: An International Journal on Friction and Wear of Materials, *181-182,* 1995.

S. Shao, P. Liu and T. L. Waskom, "Study of the Micromechanic Behavior of Short Fiber Reinforced Thermoplastic Composite of Recycled High Density Polyethylene Using Finite Element Method," *Journal of Applied Science and Computations,* 1995.

Z. Chen, P. Liu, J. D. Verhoeven and E. D. Gibson, "Sliding Wear Behavior of Deformation-Processed Cu-15%Cr in situ Composite," Accepted by *Wear*: An International Journal on Friction and Wear of Materials, 1995.

G. Townsend, T. Alwardt, P. Liu and T. L. Waskom, "An Investigation of Recycled High Density Polyethylene (HDPE) Composites Reinforced by Short Glass Fibers," Conference on Solid Waste Research and Technology, Rosemont, IL, 1995.

Z. Chen, P. Liu, J. D. Verhoeven and E. D. Gibson, "Sliding Wear Behavior and Microstructure Change of Deformation-Processed Cu-20%Nb *in situ* Composite," *Wear of Materials: 10th International Conference on Wear of Materials*, Boston, 1995.

P. Liu and T. L. Waskom, "An Investigation of Recycled High Density Polyethylene (HDPE) Composites Reinforced by Short Glass Fibers," *Final Report*, Office of Solid Waste Research, University of Illinois at Urbana-Champaign, 1995.

P. Liu and T. L. Waskom, "Implementing Plastic Recycling Experiments to Improve Undergraduate Materials Education," *ASEE-95*, 1995.

Z. Chen and P. Liu, "Signal Processing Techniques for Friction Measurement," American Society of Testing and Materials, Indianapolis, June, 1995.

P. Liu and T. L. Waskom, "Materials Experiment: Ultrasonic Welding of Recycled High Density Polyethylene," ASEE-95, 1995.

S. X. Shao, P. Liu and T. L. Waskom, "Study of the Micromechanic Behavior of Short-Fiber-Reinforced Thermoplastic Composite of Recycled High Density Polyethylene using Finite Element Method," *ICCM*, 1995.

P. Liu and T. L. Waskom, "Implementing Plastic Recycling Experiments to Enhance Materials Education," Annual Convention of NAIT, 1995.

Z. Chen and P. Liu, "Tribological Behavior of Cu-20%Nb and Cu-15%Cr in situ Composites under Dry Sliding," ASM Materials Week, 1995.

Q. Lou, P. Liu and M. Izadi, "Nonlinear Finite Element Micromechanic Analysis of Thermoplastic Composite of Recycled HDPE Reinforced with Short Glass Fibers," International Conference of Advances on Scientific Computing and Mathematic Modeling, 1995.

K. Wang, P. Liu and M. Izadi, "Data Management for Quality Improvement," International Conference of Advances on Scientific Computing and Mathematic Modeling, 1995.

P. Liu and T. L. Waskom, "Plastics Recycling Experiments in Materials Education," NEW 95: Standard Experiments on Engineering Materials Science and Technology, Oak Ridge, TN, 1995.

P. Liu, T. L. Waskom, Z. Chen, Y. Li, and L. Peng, "Compression Molding of Composite of Recycled HDPE and Recycled Tire Particles," NEW 95: Standard Experiments on Engineering Materials Science and Technology, Oak Ridge, TN, 1995.

D. Armel, "Something New About Notetaking: A Computer-Based Instructional Expreiment," Presentation at the Association of Small Computer Users in Education, 1995.

L. C. Butler, M. Izadi, and M. Toosi, "Research Topics for Industrial Technology," Journal of Industrial Technology, 1995.

M. Izadi, "Benefits of Benchmarking Strategy," Proceedings of the National

See **PUBLICATIONS** *page 7*

RESEARCH ON MATERIALS PROPERTIES, RECYCLING, DATA ACQUISITION, AND QUALITY INFORMATION SYSTEMS

The year of 1995 was a very productive year for the research team in materials properties and recycling. The team completed three major projects during the year. One of them was supported by the National Science Foundation, – "Implementing Plastic Recycling Experiments for Improvement of Undergraduate Education in Materials Technology," (Ping Liu and Tommy L. Waskom). The second project, "Thermoplastic Composites of Recycled High Density Polyethylene Reinforced by Short Glass Fibers" (Ping Liu and Tommy L. Waskom), was sponsored by the Illinois Department of Energy and Natural Resources through the Office of Solid Waste Research at University of Illinois at Urbana-Champaign. The third completed research, entitled "Study of Composite of Recycled High Density Polyethylene and Recycled Tire Chips" (Ping Liu), was supported by the Council for Faculty Research at Eastern Illinois University.

Four research grants were received in 1995. The first one was from the National Science Foundation and titled "Enhanced Plastic Recycling Experiments to Further Improve Undergraduate Materials Education" (Ping Liu, Tommy L. Waskom and Ray Richardson). This grant supported the purchase of a polymer rheological testing system and an injection molding machine. The state-of-the-art fully automatic machine is being used by students in the Polymer and Composites class. There are plans to add more courses in plastics and eventually to offer a major in plastic processing.

The second grant received in 1995 was from the Illinois Department of Natural Resources through the Office of Solid Waste Research at the University of Illinois at Champaign-Urbana. The project is titled "Study of Composite Materials Made of Recycled High Density Polyethylene and Scrap Automobile Tire Particles" (Ping Liu and Tommy L. Waskom).

The third project, "Micromechanic Study of Recycled Plastic Composite using Finite Element Method" (Ping Liu), was supported by The Charles A. and Anne Morrow Lindbergh Foundation. The Lindbergh Foundation promotes the philosophical ideas of the aviation pioneer on a balance between technology and the living environment. This prestigious grant provided full confidence regarding the importance of the research activities at the School of Technology.

The fourth research project was from the Council for Faculty Research at Eastern Illinois University titled "Study of Compatibilizers for the Composites of Recycled HDPE and Recycled Tire Particles" (Ping Liu).

With the research grants received and currently ongoing, the School of Technology was able to upgrade the testing and processing equipment to provide graduate research assistantships and involve more undergraduate students in problem-solving activities. Now, a full scope service of failure analysis on materials and components can be studied as research capabilities increase. A separate brochure has been developed by the Business and Technology Institute regarding the failure analysis available to help industry solve product failure problems.

Current research at the School of Technology has a wide participation from faculty and students. On the materials research, Dr. Ping Liu, Dr. Tommy L. Waskom and Mr. Ray Richardson have been working together. Dr. Ping Liu and Mr. Ray Richardson are working at a project of using LabView to develop a mobile data acquisition system. Drs. Ping Liu and Mayhar Izadi are working together to develop an effective quality information system. The system is designed to promptly respond to customer feedback to provide continuous improvement of the quality of their products and services.

RETIRED SCHOOL OF TECHNOLOGY FACULTY NEWS

In 1902 Miss Carolyn Forbes initiated the Manual Training program at Eastern Illinois State College—the first such program in the state.

As of 1995, Eastern's name has changed a number of times and Manual Training has gravitated until the continuing up-scaling, up-dated concept has emerged as Industrial Technology and Technology Education.

Countless faculty (over hundreds) and thousands of students have passed through the program. Yet, the faculty who continued employment at Eastern until officially retired is indeed limited. Of those hired during the previous 65 years only 9 have officially retired from Eastern.

History indicated almost everyone hired moved up to larger universities and/or industrial positions and rarely, if any, had large income enhancements.

Dr. Russell Landis who joined the staff in 1931 was the first official retiree. He is deceased.

Dr. Walter Klehm, hired in 1938 and served as chairperson, director, and dean, retired, and the present building carries his name. Klehm is very much alive and, at over 90 years of age and a faithful Rotarian, continues to maintain several major constructions which he designed and built. He and his wife have traveled extensively.

In 1941, Dr. Ewell Fowler joined the faculty. He, too, maintained several properties and he and his wife, Marie, traveled extensively. He is deceased.

Dr. Charles Elliott joined the faculty in 1945 and sponsored the honorary fraternity for many years. Dr. Elliott was an avid golfer before and following retirement. He and Lois loved Florida winters. He is deceased.

1956 was a year of expansion with Dr. Cliff Erwin, Dr. Bob Sonderman, Mr. Rex Ray and Mr. Bob Thrall being hired. Mr. Ray soon departed for another position while the others officially retired.

Dr. Erwin continues to travel but no longer continues his early retirement efforts in the building trades. He was active in bringing the Greenwood one-room school to Eastern's campus.

Dr. Sonderman in his retirement years has learned the full meaning of volunteerism—specializing as a Hospice-terminal care provider and counselor with the Charleston Coalition for people in need. Bob and Hazel's travel interests lean to Tucson, Arizona, and Washington, D.C., where their children and grandchildren reside.

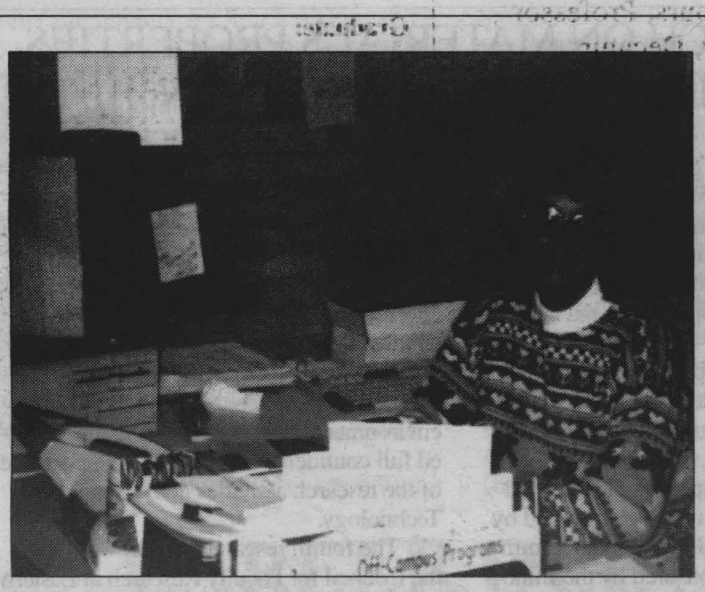
Mr. Bob Thrall was hired to teach engineering graphics. He became disabled and is deceased.

Dr. Wayne Coleman joined the faculty in 1957 as a metal specialist and later served as chair and dean. He and Shirley designed and built a fine home. He now resides in his retreat in the woods of his beloved Wisconsin. He and Shirley are back to nature.

Dr. Ray Griffin, the most recent retiree, was hired in 1958. Ray taught at the Buzzard Model School initially and later supervised student teaching and taught in Klehm Hall. He and Catherine travel, enjoy rural life, and he is known as a designer and fabricator of fine jewelry and stained glass items.

Eastern continues to hire exemplary staff, and present and past can look across the country and be proud of past faculty and former students serving admirably.

(A special thanks to Dr. Robert B. Sonderman for providing this article.



Lydia Fritts, Career Occupations secretary

Betsy Miller, academic advisor

ADVISEMENT CENTER FOR THE SCHOOL OF TECHNOLOGY

There is now an academic advising service for School of Techonology students. Betsy Miller began as academic advisor on September 1, 1995. She earned a Bachelor of Arts degree from the Eastern Illinois University BOG Program and is currently pursuing a Master's degree. Betsy's six years in the EIU Records Office makes her well qualified for academic advising and record keeping for the School of Technology. She is familiar with the many situations encountered by on- and off-campus students and is able to assist with most questions and problems.

Lydia Fritts comes to us from Moore Business Forms where she was employed as a Production Analyst for twenty years. Lydia earned a Bachelor of Science in Education degree from Eastern Illinois University. Her primary responsibilities are maintaining the COS records and providing information to COS students.

TECHNOLOGY EDUCATION EXHIBIT

The Technology Exhibition is an annual event sponsored by the School of Technology. The Exhibit is for area high school technology students and provides them with an opportunity to display their classroom activities and projects, compete for awards through skill and problem solving events, and tour Eastern Illinois University and the School of Technology.

The Exhibit is divided into four areas of competition: group projects, individual projects, problem solving competitions, and technical papers.

Group/Class/Technology Education Clubs

This division is for mass production and/or large group projects. Judging in this division is based on one sample product, related project materials (design plans, models, simulation cells, photographs, videos, fixtures, etc.) and a five minute presentation about the project by one or more of the students involved.

Problem Solving Competition

This division has been designed as an on site group competition.

Technical Papers

Technical papers should describe the resources, technical process, application and impacts of the chosen topic. Papers will be evaluated on content, neatness, and grammatical correctness. The paper may be written forother classes and presented at the Exhibit if it meets the above criteria.

Individual Projects

This category is intended to display the skills and knowledge of an individual students through projects they have completed. The individual projects are grouped into concentration areas for Industrial Technology Education. The categories for competition are Construction, Drafting, Electronics, Graphic Communication, Manufacturing, and Transportation.

Last year the Technology Exhibit was held April 27, 1995 in the University Union. The Exhibit had 180 students attended from 8 high schools: Effingham, Central Community (Breese, IL), Arcola, Lovington, Red Hill, Vocational Technical High School of Danville, Monticello, and Teutopolis.

Students competed in solving technical problems and the winners were:

Bridge construction
Effingham - Kevin Vogel

Mouse trap powered cars
Votech - Brian Braper

Glider flight time
Effingham - Ryan Banning, Daniel Thayer

Package construction
Lovington - Josh Moffitt, Donnie Bailey

Drafting
Effingham - Luke Bingman, Luther Bunton

Mystery problem (unannounced)
Votech - Keynon Lewis, Adjaye Dandridge, Billie Halls, Jovanne Bell, Kermit C. Parsons, Nell Roach

Projects which were produced at the schools were judged on quality and technical expertise.

Projects created by a group
Teutopolis - team represented by Matt Ordner

Technical papers
Monticello - Sarah Bridwell

Drafting project
Monticello - tie between Walt Johnson and Melissa Potious

Manufacturing
Monticello - Josh Rose

Homecoming 1996
October 18-20

Visit the School of Technology's Former Student Table

1995 SCHOOL OF TECHNOLOGY GRADUATES

These candidates were awarded baccalaureate degrees in the 1995 calendar year:

Manufacturing Technology

Spring 1995: Paul Dirienzo, Christopher A. Leo, Keith Pietranczyk, Kenneth J. Rawski, and Mark Andrew Wagner

Fall 1995: Andrew S. Lay, Lawrence R. Lempa, Jeffery A. Raschke, and Michael E. Watts

Technology Education

Spring 1995: Joshua Michael Orman

Summer 1995: Ryan P. Gardner and Todd Schuerman

Fall 1995: Mark L. Kannmacher and Jason M. Patterson

Industrial Technology

Spring 1995: Keith Anderson, Jeffrey D. Baron, David P. Bodine, Evan D. Chiligiris, Brian Donald Cross, Charles L. Croy, Daniel D. Dierking, Kelly Ann Evans, Rodney R. Klien, Jeffrey T. Kovich, Paul David Kroll, Leon D. McIntyre, Lisa Marie Muench, James M. Mullaghy, Jeffrey M. Pattin, Joseph V. Pecoraro, James G. Short, William Stajduhar, Jason A. Stroot, Darnell D. Thomas, Chad Dwight Whals, and Cory Dale Yarmuth

Summer 1995: Thomas C. Fox, Jesse S. Horton, William J. Kimball, James B. Temple, Angelo J. Tsaglais, and Michael J. Walsh

Fall 1995: Jeffrey T. Devore, Kevin M. Ferris, John P. Gallagher, Timothy P. Lucas, Neal Andrew Morris, Anthony Teneyck, and Brian J. White

Career Occupations

Spring 1995: Steven Branch, Debra Fridy, Donna Homann, Carole Hurst, Naser Jahanbiglar, Linda Katcher, Patricia McCreery, Michael Morris, Derald Phillips, Carlene Snell, Philip Tuttle, and Kristin Williford

Summer 1995: Cheryl Brown, Wesley Brown, Jill Garner, Chris Anthony Knerr, Vaughn Joseph Page, Carole Seyfert, and Elaine Vallangeon

Fall 1995: Phearn M. Butler, Pamela J. Chambers, Vickie K. Dean, Marsha A. Fulton, Susan Shaw-Anderson, and Vineta L. Springer

1996 SUMMER SCHEDULE

On-Campus

INT 4970/5970—Problem Solving in Manufacturing, 3 hours, Professor Liu. MW, 7:00-9:30 p.m., 117 Klehm Hall

INT 4970—Machine Tool Technology, 3 hours, Professor Waskom. Weekends of 17-18, 24-25 May, and 31 May-1 June, 106 Klehm Hall

INT 4970—Blueprint Reading for the Machine Trades, 3 hours, Professor Nelms. Weekends of 7-8, 14-15, and 21-22 June, 315 Klehm Hall

INT 5970—Data Communication Systems, 2 hours, Professor Messer. MW, 4:00-6:30 p.m., 219 Klehm Hall

Off-Campus

COS 5203—Issues and Trends in Training and Development, 3 hours, Professor Woodley. TR, 6:00-8:40 p.m., Parkland College

COS 5223—Training and Development Instructional Technology, 3 hours, Professor Armel. Weekends of 21 and 28 June, 13, 26, 27 July, and 3 August, Parkland College.

INT 4997—Effective Leadership in the Workplace of Tomorrow, 2 hours, Professor Butler. Weekends of 10, 11, 31 May, and 1 June, Parkland College

COS 4810—Principles of Career Development, 3 hours, Professor Felstehausen. Weekends of 17-18, 24-25, 31 May, 1 June, 202 Klehm Hall

COS 4820—Sociotechnical Design, 3 hours, Professor Armel. Weekends of 12, 22, 29 June, 19,20 July, 2 August, Danville

INT 5723—Issues and Trends in Technology, 3 hours, Professor Strandberg.MW, 7:00-9:30 p.m., Danville

INT 4970—TQM in Education, 3 hours, Professor Izadi. 14-15, 28-29 June, 12-13 July, Decatur

OS 4850—Productive Workteams, 3 hours, Professor Boldrey. 14-15 June, 12-13, 26-27 July, Effingham

COS 4850—Quality Processes in the Workplace, 3 hours, Mrs. Kirby. 31 May, 1, 14-15, 21-22 June, Olney

ACADEMIC ADVISEMENT AND ASSISTANCE

These people and offices can help with summer enrollment questions:

Undergraduate:

Betsy Miller, School of Technology undergraduate adviser, 102 Klehm Hall, (217) 581-7128.

Lydia Fritts, Secretary, Career Occupations, 102 Klehm Hall, telephone (217) 581-7128

Joyce Felstenhausen, Career Occupations adviser, 304-B Klehm Hall, telephone (217) 581-3912

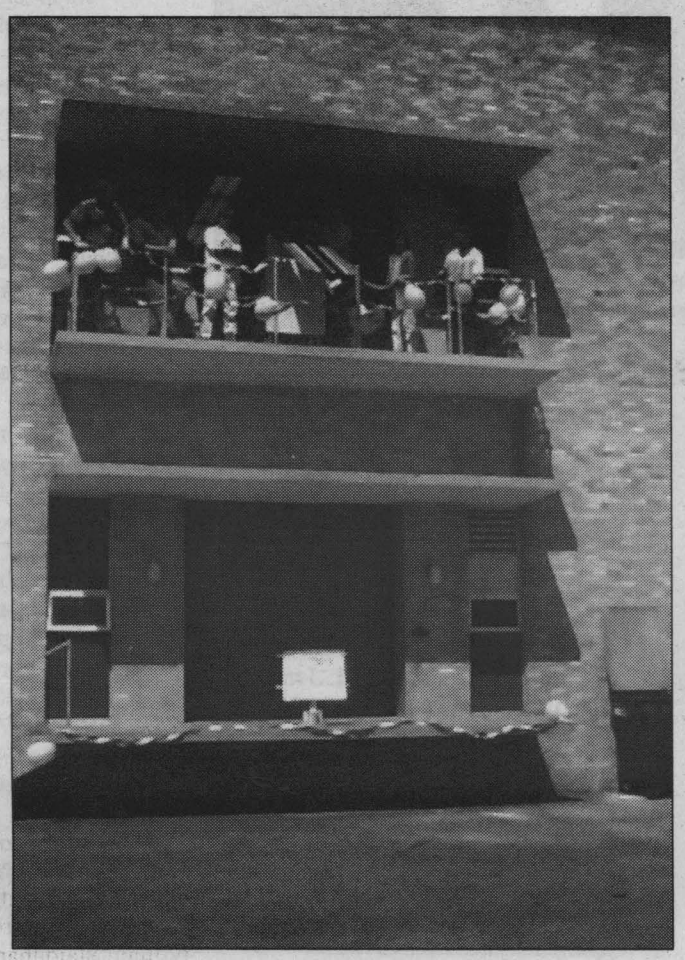
Tom Boldrey, Career Occupations adviser, 304-D Klehm Hall, telephone (217) 581-3912.

Graduate:

Graduate coordinator, 224 Klehm Hall, telephone (217) 581-2721.

Main Office:

Chair, 101 Klehm Hall, telephone (217) 581-3226, FAX to (217) 581-6607.



Students prepare for the annual Egg Drop project outside of Klehm Hall.

Problem solving in technology

The Technology Systems class requires a problem solving activity of all class members that involves planning, constructing, and testing a container designed to protect an egg during a drop to the ground. Students are given specifications that include materials as paper, glue, and tape and specifically excluding styrofoam. The egg must be easily inserted and removed after the drop to check whether it was cracked or broken during the drop.

Acceptable design and construction must meet these specifications: a design that makes the most efficient use of an eight inch cube, creativity in planning and construction, whether the egg survived the drop intact, neatness, functional opening and closure, and prototype testing. The container is dropped from an eight foot slide two stories above ground level.

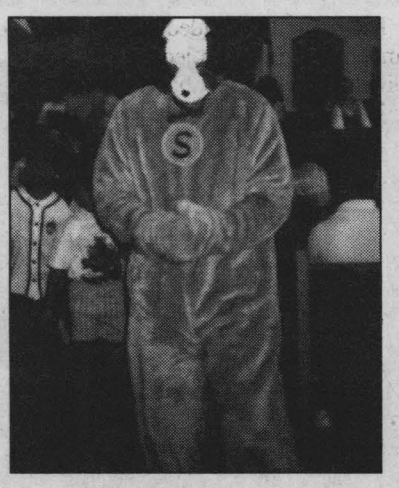
This spring's egg drop was coordinated by Betsy Miller, academic advisor, and the drops done by Bob Spoo, head football coach at the university. Of the forty egg drop trials, fourteen survived uncracked or unbroken.

New plastic molding machine installed

The School of Technology has just had a plastic injection molding machine installed. The 50-ton injection molding machine made by Boy Machinery in Germany was acquired as part of the project support by the National Science Foundation on plastics recycling. Students in the polymers and composites class are using the machine in one of their hands-on lab projects. In the photograph are Zhongyu Chen (left), a graduate assistant, Dr. Ping Liu, Stan Bateman, a service person from the manufacturer, and Dr. Tom Waskom.

Guess who?

Do you know this faculty member? He dressed up like a dog for a church program. This faculty member often does charitable work in the community. *The Technologist* wanted to recognize his good work as a credit to the School of Technology,



PUBLICATIONS

Association of Industrial Technology, 1995.

M. Izadi and M. Toosi, "Bar Code Technology and Application, Tech Directions, October, 1995.

M. Izadi and M. Toosi, "Effective Recruitment Techniques as Identified by Students Majoring in the Field of Industrial Technology," Journal of Industrial Technology, 1995.

M. Izadi, "Quality Improvement in Manufacturing Management Education," Productivity and Quality Management Frontiers V, Institute of Industrial Engineers, 1995.

I. Sutliff, "The Revival of Apprenticeship in Education in America," Journal of Industrial Technology, and ATEA Journal, 1995.

Toosi, "Artifical Neural Network for Tool Wear Detection and Pattern Recognition Analysis," International Conference on Computers and Industrial Engineering, 1995.

M. Toosi, "Computer Numerical Control," International Conference on Advances in Scientific Computing and Modeling, 1995.

T. L. Waskom, "University Level program Trends, Employer Needs, Current Status of Curericulum and Machine Tool Work-Based Learning Project," Decatur Area Vocational Center, 1995.

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